

1 **BEFORE THE PUBLIC UTILITIES COMMISSION**
2 **OF THE STATE OF CALIFORNIA**
3
4

5 Order Instituting Rulemaking on the
6 Commission's own motion to improve
7 distribution level interconnection rules and
8 regulations for certain classes of electric
9 generators and electric storage resources.

Rulemaking 11-09-011

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11 **COMMENTS OF CALIFORNIANS FOR RENEWABLE ENERGY, INC.**
12 **ON THE DRAFT RECOMMENDATIONS FOR UTILITY**
13 **COMMUNICATIONS WITH DISTRIBUTED ENERGY RESOURCES (DER)**
14 **SYSTEMS WITH SMART INVERTERS**

15 **Introduction**

16 The Commission's e-mail of November 6, 2014 states "You need not be a "Party to the
17 Interconnection Proceeding" in order to provide Comments and Reply Comments on the Draft
18 Recommendations for Utility Communications with Distributed Energy Resources (DER)
19 Systems with Smart Inverters." Californians for Renewable Energy, Inc. (CARE) respectfully
20 submits these comments on the *Draft Recommendations for Utility Communications with*
21 *Distributed Energy Resources (DER) Systems with Smart Inverters*
22

23 **Discussion**

24 On November 6, 2014¹ the Commission requested comments address the following;
25

26 ¹ See email: From: "Ormond, Jamie" <Jamie.Ormond@cpuc.ca.gov>

Date: Nov 6, 2014 4:19 PM

27 Subject: R. 11-09-011: Smart Inverter Phase 2 Communications Protocols Comment and Reply Period
28 Announcement

Parties to: R. 11-09-011

29 The Draft Recommendations for Utility Communications with Distributed Energy Resources (DER) Systems with
Smart Inverters can be found on the CPUC Rule 21 Interconnection Website:

30 <http://www.cpuc.ca.gov/PUC/energy/rule21.htm> http://www.cpuc.ca.gov/NR/rdonlyres/899E4077-36AE-4946-8515-E68EA95C0B32/0/SIWGPhase2CommunicationsRecommendationsv2_Updated10222014.pdf

31 Please note the following Comments and Reply Comments Schedule:

Comments Due – Monday, November 10, 2014

32 Please utilize the following format:

Part 1 – Editorial Comments on the Document.

Part 2 – Substantive Comments on the SIWG Draft Recommendations.

1. Editorial Comments on the Document

The *Draft Recommendations for Utility Communications with Distributed Energy Resources (DER) Systems with Smart Inverters* fail to comply with Public Utility Regulatory Policies Act (PURPA) "Must Take" provision: "Code of Federal Regulation Section 292.303(a) Obligation to purchase from qualifying facilities. Each electric utility shall purchase, in accordance with Section 292.304, unless exempted by Section 292.309 and Section 292.310, any energy and capacity which is made available from a qualifying facility (a) Directly to the electric utility; or (2) Indirectly to the electric utility in accordance with paragraph (d) of this section."

When the utility has control of our output, they are curtailing our output and thereby violating the "must take" provisions because they are not allowing us to output energy which they must purchase.

Violation of Section 292.304(d) "Purchases "as available" or pursuant to a legally enforceable obligation. Each qualifying facility shall have the option either: (1) To provide energy as the qualifying facility determines such energy to be available for such purchases, ...;" or (2) To provide energy or capacity pursuant to a legally enforceable obligation [LEO] for the delivery of energy or capacity over a specified term..."

Part 1 – Editorial Comments on the Document

Part 2 – Substantive Comments on the SIWG Draft Recommendations

Reply Comments Due – Thursday, November 20, 2014

Please Note: You need not be a "Party to the Interconnection Proceeding" in order to provide Comments and Reply Comments on the Draft Recommendations for Utility Communications with Distributed Energy Resources (DER) Systems with Smart Inverters. Please serve Comments and Reply Comments to the R. 11 ! 09! 011 Electric Rule 21 Interconnection Service List as found on the California Public Utilities Commission Service List on the main CPUC website. http://www.cpuc.ca.gov/service_lists/

This notification supersedes other notifications on this topic.

Jamie Ormond, J.D.

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Again, the QF is able to deliver output, but if the utilities are controlling and limiting our output, then the utilities are violating our rights as to the contracts executed, either agreeing to purchase our "as available" or per a LEO, because the utilities have curtailed/controlled the output.

2. Substantive Comments on the SIWG Draft Recommendations

1. Will the utilities be able to program the Smart Inverter [SI] - "to provide reactive power by a fixed power factor"², does that mean the utility can program the SI to never exceed onsite load?

2. Reconnect by "soft start"³ methods, does that mean a long delay in our systems getting back online?

3. In that document go to page 56-57, Items 4, 9, 10, 11, 12, 14 and 15. Especially #12, #14 and #15, these to me, look like the utilities will be controlling my QF03-76 solar system's output. Is that correct?

4. So the above document was talking about Phase I and Phase 3 I-DER Functions with Communications. Please go to page 78 in the above document and see this is now talking about Phase 3... and two items of Scheduling that appear to control the Smart Inverters, the last two boxes on page 78. Especially the last box, "Schedule DER Functions" the last column is called "Constrains & Comments," "Recommended for all I-Der systems." Okay? "But may not always be activated" is maybe where we have a decision to make if we participate or not?

5. Then the third box "Communication Requirements" appears to indicate that the Utility issues schedules to the I-DER system (in other words our Smart Inverters). So it looks like the utility will be setting our systems output time and amount. Is that correct?

6. So now coming back to the Current Recommendations, Version 2.⁴ See page 4, Bullet "Real Power DER Functions", all three talk about real power output limited by the UTILITY! and the

² Go to section 2.6 on page 37, "Fixed Power Factor" and see 2.6.1 to 2.6.7. See: <http://www.cpuc.ca.gov/NR/rdonlyres/DF1E5DBE-C5F8-4276-8E96-56B60AD0DE9F/0/SIWGworkingdocinrecord.pdf>

³ *Id* at Section 2.7 on page 38-39.

1 third one ..."if permitted by tariff agreements." This is where the utilities will slide it into a tariff
2 without the hundreds of thousands of solar owners knowing they are being limited on their
3 output. So all of pages 4-5-6-7-8-9 where the utility is now controlling the private sector are
4 objectionable and in violation of PURPA's "must take" provisions.

5
6 7. In the November 1, 2013, R.11-09-011 "Notice of *Ex Parte* Communication by SMA Solar
7 Technology America, LLC states at page 10 of the attachment "Autonomous Functions:
8 Frequency-dependent Active Power Limitation." "Inverter interprets increase in frequency as
9 over-supply condition; inverter reduces active power output until frequency returns to normal."
10 That means the utility can create an increase in frequency, the inverter senses that and decreases
11 active power output in violation of PURPA's "must take" provisions.

12
13 8. (AGF) is Advanced Grid Functionality - In the August 18, 2014, R. 11-09-011 Comments of
14 the CA Solar Energy Industries Association⁵ on the Joint Motion regarding Implementation of
15 Smart Inverter Functionalities at pages 3 to 4 states "While not part of the Joint Motion,
16 CALSEIA remains concerned over potential for lost revenue created by use of the proposed AGF.
17 We reiterate our earlier recommendation for the Commission to provide specific and detailed
18 language ensuring that revenue streams of system owners will not be negatively impacted through
19 unilateral action of the utilities. As previously noted, some of the AGF proposed could result in a
20 significant negative impact on system revenue. .. New rate structures are needed that more
21 accurately represent the value of the AGF on the grid. Until those new rate structures are created,
22 operation of systems in modes that negatively impact revenue must be done only with mutually
23 agreed consent." CARE agrees and objects to the AGF as in violation of PURPA's "must take"
24 provisions.

25 26 CONCLUSIONS

27 The *Draft Recommendations for Utility Communications with Distributed Energy Resources*
28 *(DER) Systems with Smart Inverters* as currently written fails to comport with the requirements of
29 PURPA's "must take" provisions.

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⁴ Found at: http://www.cpuc.ca.gov/NR/rdonlyres/899E4077-36AE-4946-8515-E68EA95C0B32/0/SIWGPhase2CommunicationsRecommendationsv2_Updated10222014.pdf

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7 DATED: November 9, 2014

8 ⁵ See <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M103/K390/103390216.PDF>
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